

# Gulf Coast Water Authority

## Consumer Confidence Report 2020







Gulf Coast Water Authority

## RELIABLY DELIVERING WATER TO OUR CUSTOMERS

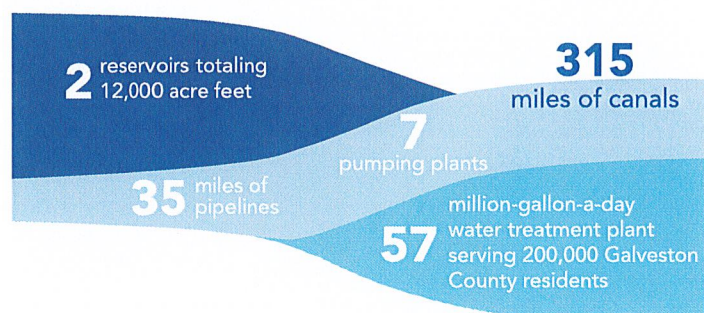
Water is essential for life, economic growth and national security. That's why we make it our mission to reliably provide vital water services to communities, businesses, farmers, and refining and petrochemical industries in our 3-county, 1.5 million-population service area.

We maintain an extensive system to deliver up to 200 million gallons of water a day from the Brazos River Basin, our primary water source, to wholesale customers across Brazoria, Galveston and Fort Bend counties.

Since established as a water utility by the Texas Legislature in 1965, we've continued to grow to meet the ever-changing needs of the communities and businesses we serve.

### WHAT WE DO

We maintain an extensive water delivery system that carries raw water from the Brazos River, as well as Chocolate, Mustang and Halls bayous, directly to our wholesale customers and to our water treatment plant.



**Our canal division** continuously monitors and maintains 6 pumping plants, our canal system and more than 600 canal crossings. The division also provides water to farmers with a total of 17,300 acres.

**Our industrial infrastructure** includes an industrial pumping plant and pipeline system that provides water to major industries in the Texas City industrial complex. The new Joseph A. Willhelm Industrial Pumping Plant expands pumping capacity by almost 25 percent to 95 million gallons a day, ensuring long-term reliability and industrial growth.

**Our water treatment plant** is manned around the clock to produce tap water to serve almost 200,000 residents across Galveston County. The Thomas Mackey Water Treatment Plant has a daily production capacity of more than 57 million gallons.

**GCWA is governed** by a 10-member Board of Directors appointed by the Brazoria, Fort Bend and Galveston County Commissioners Courts to represent industrial, municipal and agricultural interests in our service area.

### MAJOR MILESTONES

EARLY  
1900s

Legacy entities built canals for 1900s agriculture



1949

Texas City industries built industrial pumping plant



1965

Texas Legislature established GCWA



1971

Acquired private Texas City industrial water infrastructure assets



1981

Acquired Thomas Mackey Water Treatment Plant in Texas City



1988

Acquired Brazos River Authority water rights and canal assets



2016

Established rice farming water metering program to reduce water use



2020

Began construction on replacement \$8.7 million Chocolate Bayou Pumping Plant



2020

Commissioned new \$19 million Joseph A. Willhelm Industrial Pumping Plant





# PLANNING FOR THE FUTURE

*As we work today to reliably deliver water to our customers, we're also planning to meet demand for decades to come.*

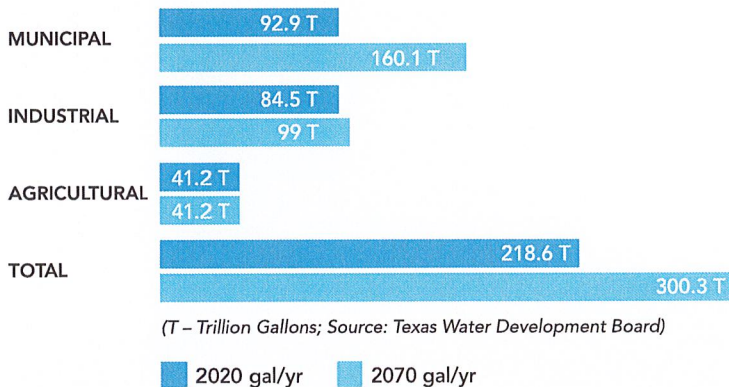
**Water Resource Planning:** By evaluating current customer usage and analyzing population and growth projections, we're developing water resource and infrastructure plans in coordination with our customers to meet future needs.

**Capital Projects:** Guided by our comprehensive strategy, we're prioritizing major capital projects to replace aging infrastructure to ensure reliability while minimizing customer rate impacts.

**New Water Resources:** Water is a limited resource but demand will continue to grow. In the next 50 years water demand in Texas is estimated to rise 17 percent, while water supply is predicted to fall by 11 percent.

To meet future demand in our 3-county service area, we'll diversify our water resources beyond the Brazos River Basin, our primary source of water. This could include better use of reclaimed water, acquisition of deep-water aquifer wells, and longer-term initiatives such as desalination.

## ANNUAL WATER DEMAND PROJECTED FOR OUR 3-COUNTY SERVICE AREA:



## VITAL WATER FOR

8

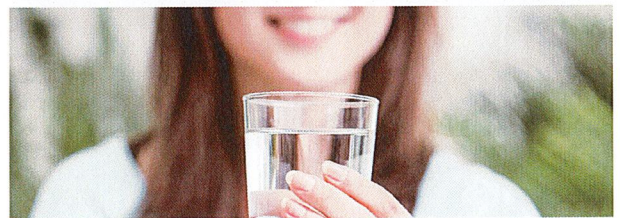
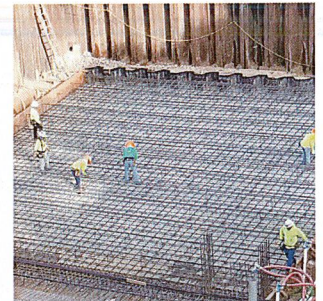
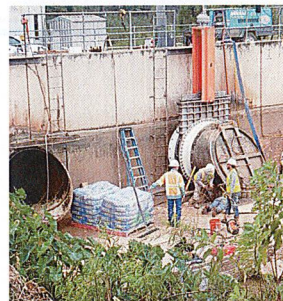
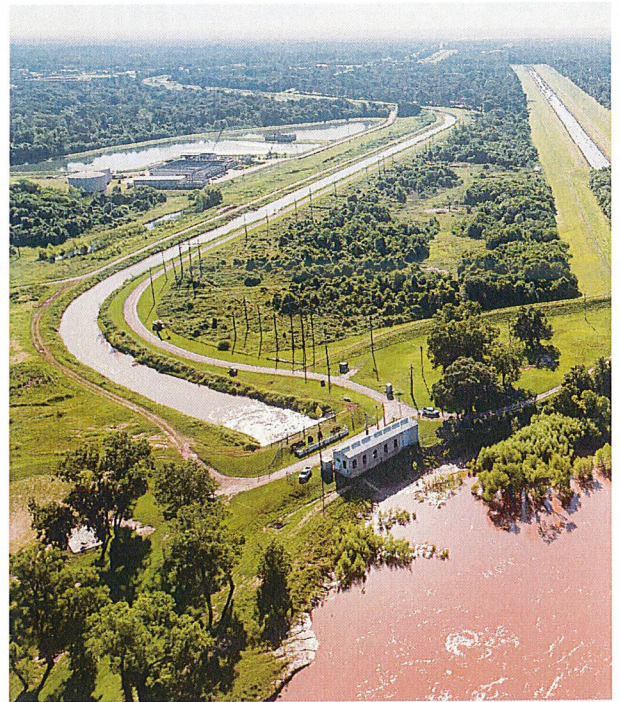
major industries

17,300

acres of farmland

18

communities



## GULF COAST WATER AUTHORITY

3630 FM 1765 | Texas City, TX 77591

(409) 935-2438 | [www.GulfCoastWaterAuthorityTX.gov](http://www.GulfCoastWaterAuthorityTX.gov)

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Gulf Coast Water Authority





Gulf Coast Water Authority  
CCR Summary Data  
2020

2020 Turbidity Summary			
Month	Highest NTU	Average NTU	% Samples < 0.3 NTU
Jan-20	0.10	0.06	100.0%
Feb-20	0.06	0.04	100.0%
Mar-20	0.10	0.04	100.0%
Apr-20	0.10	0.04	100.0%
May-20	0.08	0.05	100.0%
Jun-20	0.07	0.04	100.0%
Jul-20	0.06	0.05	100.0%
Aug-20	0.06	0.05	100.0%
Sep-20	0.08	0.05	100.0%
Oct-20	0.07	0.04	100.0%
Nov-20	0.06	0.04	100.0%
Dec-20	0.09	0.05	100.0%
Yr. Minimum	0.06	0.04	
Yr. Maximum	0.10	0.06	
Yr. Average	0.08	0.05	

Date	Raw mg/L	2020 TOC Removal at WTP POE				
		Alk mg/L	POE mg/L	Removal %	TCEQ %	Ratio
Jan-20	3.03	168	1.92	36.70	15.00	2.45
Feb-20	3.31	155	2.02	39.10	15.00	2.61
Mar-20	3.64	140	2.26	38.00	15.00	2.54
Apr-20	3.71	132	2.45	33.70	15.00	2.25
May-20	3.89	139	2.37	39.30	18.30	2.27
Jun-20	3.92	122	2.21	43.70	22.50	2.03
Jul-20	3.24	134	1.92	40.90	17.00	2.49
Aug-20	3.09	138	1.78	42.60	15.00	2.84
Sep-20	2.96	153	1.83	38.20	15.00	2.55
Oct-20	3.06	138	1.78	41.80	15.00	2.79
Nov-20	2.59	148	1.61	38.10	15.00	2.54
Dec-20	2.65	156	1.67	36.40	15.00	2.43
Average	3.26	143.58	1.99	39.04	16.07	2.48
Maximum	3.92	168.00	2.45	43.70	22.50	2.84
Minimum	2.59	122.00	1.61	33.70	15.00	2.03



Gulf Coast Water Authority  
CCR Summary Data  
2020

2020 Chlorite Data

Date	POE Chlorite Samples		
	Maximum mg/L	Minimum mg/L	Average mg/L
January	0.78	0.25	0.53
February	0.90	0.46	0.57
March	0.37	0.60	0.50
April	0.85	0.34	0.48
May	0.57	0.24	0.39
June	0.36	0.18	0.24
July	0.52	0.16	0.27
August	0.49	0.20	0.33
September	0.44	0.19	0.35
October	0.41	0.24	0.31
November	0.47	0.26	0.34
December	0.38	0.27	0.33
Average	0.55	0.28	0.39
Maximum	0.90	0.60	0.57
Minimum	0.36	0.16	0.24

2020 Chlorine Dioxide Data

Date	POE Chlorine Dioxide	
	Maximum ppb	Minimum ppb
January	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	0	0
July	0	0
August	0	0
September	0	0
October	0	0
November	0	0
December	0	0
Average	0	0
Maximum	0	0
Minimum	0	0



# SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES  
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER

Summary Page

PUBLIC WATER  
SYSTEM NAME: GULF COAST WATER AUTHORITY TX CITY

PLANT NAME  
OR NUMBER: SWTP - THOMAS MACKEY WTP - BRAZOS

PWS ID No.: 0840153  
Plant ID No.: 14813  
Report for  
the Month of: January 2020

Operator's Signature: \_\_\_\_\_

I certify that I am familiar with the information contained in this report and that,  
to the best of my knowledge, the information is true, complete, and accurate.

Certificate No. & Grade: WO0041290, A

Date: February 7, 2020

## TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	<u>186</u>	Number of 4-hour periods when plant was off-line:	<u>0</u>
Number of readings above 0.10 NTU:	<u>0</u>	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	<u>0</u>
Number of readings above 0.3 NTU:	<u>0</u>	Number of days when plant was on-line but individual filter turbidity data was not collected:	<u>0</u>
Number of readings above 0.5 NTU:	<u>0</u>	Number of days with readings above 1.0 NTU:	<u>0</u> (2)
Maximum allowable turbidity level:	<u>0.3</u>	Number of days with readings above 5.0 NTU:	<u>0</u> (3)
Percentage of readings above this limit:	<u>0.0</u> % (1)		
Number of days with a low CT for no more than 4.0 consecutive hours:	<u>0</u>	Average log inactivation for Giardia:	<u>2.95</u>
Number of days with a low CT for more than 4.0 consecutive hours:	<u>0</u> (4)	Average log inactivation for viruses:	<u>91.43</u>
		Number of days when profiling data was not collected:	<u>0</u>
		Number of days when CT data was not collected:	<u>0</u>
Minimum disinfectant residual required leaving the plant:	<u>0.5</u> mg/L, measured as Total Chlorine		
Number of days with a low residual for no more than 4.0 consecutive hours:	<u>0</u>	Minimum pH in the last disinfection zone:	<u>7.22</u>
Number of days with a low residual for more than 4.0 consecutive hours:	<u>0</u> (5)	Number of days with pH below 7.0 in the last disinfection zone:	<u>0.00</u>
		Number of days when disinfectant residual leaving the plant was not properly monitored:	<u>0</u>

## DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	<u>0.5</u> mg/L, measured as Total Chlorine		
Total number of readings this month:	<u>186</u> (at least 120 required) (8)	Percentage of readings with a low residual this month:	<u>0.0</u> % (6A)
Average disinfectant residual value:	<u>3.07</u>	Percentage of readings with a low residual last month:	<u>0.0</u> % (6B)
Number of readings with a low residual:	<u>0</u>		
Number of readings with no detectable residual:	<u>0</u>		

## ADDITIONAL REPORTS & WORKSHEETS

The Page 1 Addendum (Public Notices) is not required because there were no treatment technique or monitoring/reporting violations reported.

Additional report(s) for individual filter monitoring required: ☒ NONE ☐ ☐ ☐ CPE  
Additional report(s) for individual filter monitoring submitted: ☒ NONE ☐ Filter Profile (9) ☐ Filter Assessment (10) ☐ CPE (11)  
No additional IFE Reports are required this month.

## STATISTICAL ANALYSIS OF TURBIDITY DATA

Settled Water Statistical Summary	Maximum turbidity reading:	<u>0.76</u> NTU	Average turbidity value:	<u>0.25</u> NTU
	Minimum turbidity reading:	<u>0.13</u> NTU	Standard deviation:	<u>0.133</u> NTU
	95 <sup>th</sup> percentile value:	<u>0.55</u> NTU		
IFE Statistical Summary	Maximum IFE turbidity reading:	<u>0.15</u> NTU	Average IFE turbidity value:	<u>0.06</u> NTU
	Minimum IFE turbidity reading:	<u>0.03</u> NTU	Standard deviation:	<u>0.022</u> NTU
	95 <sup>th</sup> percentile IFE value:	<u>0.10</u> NTU		
CFE Statistical Summary	Maximum CFE turbidity reading:	<u>0.10</u> NTU	Average CFE turbidity value:	<u>0.06</u> NTU
	Minimum CFE turbidity reading:	<u>0.03</u> NTU	Standard deviation:	<u>0.011</u> NTU
	95 <sup>th</sup> percentile CFE value:	<u>0.08</u> NTU		

## STATISTICAL ANALYSIS OF pH DATA

Last Zone pH Statistical Summary	Maximum pH reading:	<u>7.50</u> pH	Average pH value:	<u>7.35</u> pH
	Minimum pH reading:	<u>7.22</u> pH	Standard deviation:	<u>0.054</u> pH
	95 <sup>th</sup> percentile value:	<u>7.43</u> pH		

**SURFACE WATER MONTHLY OPERATING REPORT**  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)  
P.O. BOX 13087, AUSTIN, TEXAS 78711-3087



**SURFACE WATER MONTHLY OPERATING REPORT**  
 FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES  
 OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER  
 Summary Page

**PUBLIC WATER**

SYSTEM NAME: GULF COAST WATER AUTHORITY TX CITY

**PLANT NAME**

OR NUMBER: SWTP - THOMAS MACKEY WTP - BRAZOS

PWS ID No.: 0840153

Plant ID No.: 14813

Report for the Month of: February 2020

Operator's Signature: \_\_\_\_\_

Certificate No. & Grade: WO0041290, A

Date: March 5, 2020

I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

**TREATMENT PLANT PERFORMANCE**

Total number of turbidity readings:	<u>174</u>	Number of 4-hour periods when plant was off-line:	<u>0</u>
Number of readings above 0.10 NTU:	<u>0</u>	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	<u>0</u>
Number of readings above 0.3 NTU:	<u>0</u>	Number of days when plant was on-line but individual filter turbidity data was not collected:	<u>0</u>
Number of readings above 0.5 NTU:	<u>0</u>	Number of days with readings above 1.0 NTU:	<u>0</u> (2)
Number of readings above 1.0 NTU:	<u>0</u>	Number of days with readings above 5.0 NTU:	<u>0</u> (3)
Maximum allowable turbidity level:	<u>0.3</u>		
Percentage of readings above this limit:	<u>0.0</u> % (1)		
Number of days with a low CT for no more than 4.0 consecutive hours:	<u>0</u>	Average log inactivation for Giardia:	<u>2.57</u>
Number of days with a low CT for more than 4.0 consecutive hours:	<u>0</u> (4)	Average log inactivation for viruses:	<u>78.51</u>
Minimum disinfectant residual required leaving the plant:	<u>0.5</u> mg/L, measured as Total Chlorine	Number of days when profiling data was not collected:	<u>0</u>
Number of days with a low residual for no more than 4.0 consecutive hours:	<u>0</u>	Number of days when CT data was not collected:	<u>0</u>
Number of days with a low residual for more than 4.0 consecutive hours:	<u>0</u> (5)		
		Minimum pH in the last disinfection zone:	<u>7.21</u>
		Number of days with pH below 7.0 in the last disinfection zone:	<u>0.00</u>
		Number of days when disinfectant residual leaving the plant was not properly monitored:	<u>0</u>

**DISTRIBUTION SYSTEM**

Minimum disinfectant residual required in distribution system:	<u>0.5</u> mg/L, measured as Total Chlorine
Total number of readings this month:	<u>174</u> (at least 120 required) (8)
Average disinfectant residual value:	<u>3.15</u>
Percentage of readings with a low residual this month:	<u>0.0</u> % (6A)
Number of readings with a low residual:	<u>0</u>
Percentage of readings with a low residual last month:	<u>0.0</u> % (6B)
Number of readings with no detectable residual:	<u>0</u>

**ADDITIONAL REPORTS & WORKSHEETS**

The Page 1 Addendum (Public Notices) is not required because there were no treatment technique or monitoring/reporting violations reported.

Additional report(s) for individual filter monitoring required: ☒ NONE ☐ \_\_\_\_\_ ☐ CPE  
 Additional report(s) for individual filter monitoring submitted: ☒ NONE ☐ Filter Profile (9) ☐ Filter Assessment (10) ☐ CPE (11)  
 No additional IFE Reports are required this month.

**STATISTICAL ANALYSIS OF TURBIDITY DATA**

Settled Water Statistical Summary	Maximum turbidity reading:	<u>1.42</u> NTU	Average turbidity value:	<u>0.39</u> NTU
	Minimum turbidity reading:	<u>0.19</u> NTU	Standard deviation:	<u>0.208</u> NTU
	95 <sup>th</sup> percentile value:	<u>0.71</u> NTU		
IFE Statistical Summary	Maximum IFE turbidity reading:	<u>0.14</u> NTU	Average IFE turbidity value:	<u>0.05</u> NTU
	Minimum IFE turbidity reading:	<u>0.02</u> NTU	Standard deviation:	<u>0.024</u> NTU
	95 <sup>th</sup> percentile IFE value:	<u>0.10</u> NTU		
CFE Statistical Summary	Maximum CFE turbidity reading:	<u>0.06</u> NTU	Average CFE turbidity value:	<u>0.04</u> NTU
	Minimum CFE turbidity reading:	<u>0.03</u> NTU	Standard deviation:	<u>0.006</u> NTU
	95 <sup>th</sup> percentile CFE value:	<u>0.05</u> NTU		

**STATISTICAL ANALYSIS OF pH DATA**

Last Zone pH Statistical Summary	Maximum pH reading:	<u>7.36</u> pH	Average pH value:	<u>7.28</u> pH
	Minimum pH reading:	<u>7.21</u> pH	Standard deviation:	<u>0.037</u> pH
	95 <sup>th</sup> percentile value:	<u>7.34</u> pH		

**SURFACE WATER MONTHLY OPERATING REPORT**  
 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
 WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)  
 P.O. BOX 13087, AUSTIN, TEXAS 78711-3087



# SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES  
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER

## Summary Page

### PUBLIC WATER

SYSTEM NAME: GULF COAST WATER AUTHORITY TX CITY

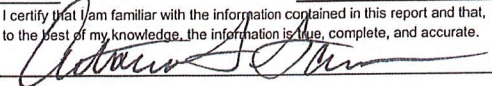
### PLANT NAME

OR NUMBER: SWTP - THOMAS MACKEY WTP - BRAZOS

I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

PWS ID No.: 0840153

Plant ID No.: 14813

Operator's Signature: 

Report for the Month of: March 2020

Certificate No. & Grade: WO0041290, A

Date: April 2, 2020

### TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	<u>186</u>	Number of 4-hour periods when plant was off-line:	<u>0</u>
Number of readings above 0.10 NTU:	<u>0</u>	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	<u>0</u>
Number of readings above 0.3 NTU:	<u>0</u>	Number of days when plant was on-line but individual filter turbidity data was not collected:	<u>0</u>
Number of readings above 0.5 NTU:	<u>0</u>	Number of days with readings above 1.0 NTU:	<u>0</u> (2)
Number of readings above 1.0 NTU:	<u>0</u>	Number of days with readings above 5.0 NTU:	<u>0</u> (3)
Maximum allowable turbidity level:	<u>0.3</u>		
Percentage of readings above this limit:	<u>0.0</u> % (1)		
Number of days with a low CT for no more than 4.0 consecutive hours:	<u>0</u>	Average log inactivation for Giardia:	<u>3.42</u>
Number of days with a low CT for more than 4.0 consecutive hours:	<u>0</u> (4)	Average log inactivation for viruses:	<u>103.56</u>
Minimum disinfectant residual required leaving the plant:	<u>0.5</u> mg/L, measured as Total Chlorine	Number of days when profiling data was not collected:	<u>0</u>
Number of days with a low residual for no more than 4.0 consecutive hours:	<u>0</u>	Number of days when CT data was not collected:	<u>0</u>
Number of days with a low residual for more than 4.0 consecutive hours:	<u>0</u> (5)		
		Minimum pH in the last disinfection zone:	<u>7.12</u>
		Number of days with pH below 7.0 in the last disinfection zone:	<u>0.00</u>
		Number of days when disinfectant residual leaving the plant was not properly monitored:	<u>0</u>

### DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	<u>0.5</u> mg/L, measured as Total Chlorine		
Total number of readings this month:	<u>186</u> (at least 120 required) (8)	Percentage of readings with a low residual this month:	<u>0.0</u> % (6A)
Average disinfectant residual value:	<u>3.01</u>	Percentage of readings with a low residual last month:	<u>0.0</u> % (6B)
Number of readings with a low residual:	<u>0</u>		
Number of readings with no detectable residual:	<u>0</u>		

### ADDITIONAL REPORTS & WORKSHEETS

The Page 1 Addendum (Public Notices) is not required because there were no treatment technique or monitoring/reporting violations reported.

Additional report(s) for individual filter monitoring required: ☒ NONE ☐ Filter Profile ☐ Filter Assessment ☐ CPE

Additional report(s) for individual filter monitoring submitted: ☒ NONE ☐ Filter Profile (9) ☐ Filter Assessment (10) ☐ CPE (11)

No additional IFE Reports are required this month.

### STATISTICAL ANALYSIS OF TURBIDITY DATA

Settled Water Statistical Summary	Maximum turbidity reading:	<u>1.15</u> NTU	Average turbidity value:	<u>0.42</u> NTU
	Minimum turbidity reading:	<u>0.14</u> NTU	Standard deviation:	<u>0.280</u> NTU
	95 <sup>th</sup> percentile value:	<u>1.01</u> NTU		
IFE Statistical Summary	Maximum IFE turbidity reading:	<u>0.86</u> NTU	Average IFE turbidity value:	<u>0.06</u> NTU
	Minimum IFE turbidity reading:	<u>0.02</u> NTU	Standard deviation:	<u>0.064</u> NTU
	95 <sup>th</sup> percentile IFE value:	<u>0.10</u> NTU		
CFE Statistical Summary	Maximum CFE turbidity reading:	<u>0.10</u> NTU	Average CFE turbidity value:	<u>0.04</u> NTU
	Minimum CFE turbidity reading:	<u>0.03</u> NTU	Standard deviation:	<u>0.010</u> NTU
	95 <sup>th</sup> percentile CFE value:	<u>0.06</u> NTU		

### STATISTICAL ANALYSIS OF pH DATA

Last Zone pH Statistical Summary	Maximum pH reading:	<u>7.40</u> pH	Average pH value:	<u>7.23</u> pH
	Minimum pH reading:	<u>7.12</u> pH	Standard deviation:	<u>0.063</u> pH
	95 <sup>th</sup> percentile value:	<u>7.30</u> pH		

## SURFACE WATER MONTHLY OPERATING REPORT

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)  
P.O. BOX 13087, AUSTIN, TEXAS 78711-3087



**SURFACE WATER MONTHLY OPERATING REPORT**  
**FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES**  
**OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER**  
*Summary Page*

**PUBLIC WATER**

**SYSTEM NAME:** GULF COAST WATER AUTHORITY TX CITY

**PLANT NAME**

**OR NUMBER:**

SWTP - THOMAS MACKEY WTP - BRAZOS

I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete and accurate.

**PWS ID No.:** 0840153

**Plant ID No.:** 14813

**Operator's Signature:**

**Report for**

**the Month of:** April 2020

**Certificate No. & Grade:**

WO0041290, A

**Date:**

May 6, 2020

**TREATMENT PLANT PERFORMANCE**

Total number of turbidity readings:	180	Number of 4-hour periods when plant was off-line:	0
Number of readings above 0.10 NTU:	0	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	0
Number of readings above 0.3 NTU:	0	Number of days when plant was on-line but individual filter turbidity data was not collected:	0
Number of readings above 0.5 NTU:	0	Number of days with readings above 1.0 NTU:	0 (2)
Number of readings above 1.0 NTU:	0	Number of days with readings above 5.0 NTU:	0 (3)
Maximum allowable turbidity level:	0.3		
Percentage of readings above this limit:	0.0 % (1)		
Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	3.93
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Average log inactivation for viruses:	121.60
		Number of days when profiling data was not collected:	0
		Number of days when CT data was not collected:	0
Minimum disinfectant residual required leaving the plant:	0.5 mg/L, measured as Total Chlorine		
Number of days with a low residual for no more than 4.0 consecutive hours:	0	Minimum pH in the last disinfection zone:	7.15
Number of days with a low residual for more than 4.0 consecutive hours:	0 (5)	Number of days with pH below 7.0 in the last disinfection zone:	0.00
		Number of days when disinfectant residual leaving the plant was not properly monitored:	0

**DISTRIBUTION SYSTEM**

Minimum disinfectant residual required in distribution system:	0.5 mg/L, measured as Total Chlorine
Total number of readings this month:	180 (at least 120 required) (8)
Average disinfectant residual value:	3.05
Percentage of readings with a low residual this month:	0.0 % (6A)
Number of readings with a low residual:	0
Percentage of readings with a low residual last month:	0.0 % (6B)
Number of readings with no detectable residual:	0

**ADDITIONAL REPORTS & WORKSHEETS**

The Page 1 Addendum (Public Notices) is not required because there were no treatment technique or monitoring/reporting violations reported.

Additional report(s) for individual filter monitoring required:

☒ NONE

☐ Filter Profile

☐ Filter Assessment

☐ CPE

Additional report(s) for individual filter monitoring submitted:

☒ NONE

☐ Filter Profile (9)

☐ Filter Assessment (10)

☐ CPE (11)

No additional IFE Reports are required this month.

**STATISTICAL ANALYSIS OF TURBIDITY DATA**

Settled Water Statistical Summary	Maximum turbidity reading:	0.99 NTU	Average turbidity value:	0.42 NTU
	Minimum turbidity reading:	0.16 NTU	Standard deviation:	0.224 NTU
	95 <sup>th</sup> percentile value:	0.86 NTU		
IFE Statistical Summary	Maximum IFE turbidity reading:	0.12 NTU	Average IFE turbidity value:	0.05 NTU
	Minimum IFE turbidity reading:	0.02 NTU	Standard deviation:	0.018 NTU
	95 <sup>th</sup> percentile IFE value:	0.09 NTU		
CFE Statistical Summary	Maximum CFE turbidity reading:	0.10 NTU	Average CFE turbidity value:	0.04 NTU
	Minimum CFE turbidity reading:	0.03 NTU	Standard deviation:	0.010 NTU
	95 <sup>th</sup> percentile CFE value:	0.06 NTU		

**STATISTICAL ANALYSIS OF pH DATA**

Last Zone pH Statistical Summary	Maximum pH reading:	7.44 pH	Average pH value:	7.23 pH
	Minimum pH reading:	7.15 pH	Standard deviation:	0.064 pH
	95 <sup>th</sup> percentile value:	7.36 pH		

**SURFACE WATER MONTHLY OPERATING REPORT**  
**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**  
**WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)**  
**P.O. BOX 13087, AUSTIN, TEXAS 78711-3087**



# SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES  
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER

## Summary Page

PUBLIC WATER SYSTEM NAME: <u>GULF COAST WATER AUTHORITY TX CITY</u>	PLANT NAME OR NUMBER: <u>SWTP - THOMAS MACKEY WTP - BRAZOS</u>	
PWS ID No.: <u>0840153</u>	I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.	
Plant ID No.: <u>14813</u>	Operator's Signature: <u><i>William J. Han</i></u>	
Report for the Month of: <u>May 2020</u>	Certificate No. & Grade: <u>WO0041290, A</u>	Date: <u>June 4, 2020</u>

### TREATMENT PLANT PERFORMANCE

Total number of turbidity readings: <u>186</u>	Number of 4-hour periods when plant was off-line: <u>0</u>	
Number of readings above 0.10 NTU: <u>0</u>	Number of 4-hour periods when plant was on-line but turbidity data was not collected: <u>0</u>	
Number of readings above 0.3 NTU: <u>0</u>	Number of days when plant was on-line but individual filter turbidity data was not collected: <u>0</u>	
Number of readings above 0.5 NTU: <u>0</u>	Number of days with readings above 1.0 NTU: <u>0</u> (2)	
Number of readings above 1.0 NTU: <u>0</u>	Number of days with readings above 5.0 NTU: <u>0</u> (3)	
Maximum allowable turbidity level: <u>0.3</u>		
Percentage of readings above this limit: <u>0.0</u> % (1)		
Number of days with a low CT for no more than 4.0 consecutive hours: <u>0</u>	Average log inactivation for Giardia: <u>4.58</u>	
Number of days with a low CT for more than 4.0 consecutive hours: <u>0</u> (4)	Average log inactivation for viruses: <u>145.33</u>	
	Number of days when profiling data was not collected: <u>0</u>	
	Number of days when CT data was not collected: <u>0</u>	
Minimum disinfectant residual required leaving the plant: <u>0.5</u> mg/L, measured as Total Chlorine		
Number of days with a low residual for no more than 4.0 consecutive hours: <u>0</u>	Minimum pH in the last disinfection zone: <u>7.15</u>	
Number of days with a low residual for more than 4.0 consecutive hours: <u>0</u> (5)	Number of days with pH below 7.0 in the last disinfection zone: <u>0.00</u>	
	Number of days when disinfectant residual leaving the plant was not properly monitored: <u>0</u>	

### DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system: <u>0.5</u> mg/L, measured as Total Chlorine		
Total number of readings this month: <u>186</u> (at least 120 required) (8)	Percentage of readings with a low residual this month: <u>0.0</u> % (6A)	
Average disinfectant residual value: <u>3.09</u>	Percentage of readings with a low residual last month: <u>0.0</u> % (6B)	
Number of readings with a low residual: <u>0</u>		
Number of readings with no detectable residual: <u>0</u>		

### ADDITIONAL REPORTS & WORKSHEETS

The Page 1 Addendum (Public Notices) is not required because there were no treatment technique or monitoring/reporting violations reported.

Additional report(s) for individual filter monitoring required: ☒ NONE ☐ Filter Profile ☐ Filter Assessment ☐ CPE

Additional report(s) for individual filter monitoring submitted: ☒ NONE ☐ Filter Profile (9) ☐ Filter Assessment (10) ☐ CPE (11)

No additional IFE Reports are required this month.

### STATISTICAL ANALYSIS OF TURBIDITY DATA

<b>Settled Water</b>	<b>Stastical Summary</b>	Maximum turbidity reading: <u>1.21</u> NTU	Average turbidity value: <u>0.45</u> NTU
		Minimum turbidity reading: <u>0.11</u> NTU	Standard deviation: <u>0.239</u> NTU
		95 <sup>th</sup> percentile value: <u>0.87</u> NTU	
<b>IFE</b>	<b>Stastical Summary</b>	Maximum IFE turbidity reading: <u>0.15</u> NTU	Average IFE turbidity value: <u>0.06</u> NTU
		Minimum IFE turbidity reading: <u>0.03</u> NTU	Standard deviation: <u>0.021</u> NTU
		95 <sup>th</sup> percentile IFE value: <u>0.10</u> NTU	
<b>CFE</b>	<b>Stastical Summary</b>	Maximum CFE turbidity reading: <u>0.08</u> NTU	Average CFE turbidity value: <u>0.05</u> NTU
		Minimum CFE turbidity reading: <u>0.04</u> NTU	Standard deviation: <u>0.008</u> NTU
		95 <sup>th</sup> percentile CFE value: <u>0.06</u> NTU	

### STATISTICAL ANALYSIS OF pH DATA

<b>Last Zone pH</b>	<b>Stastical Summary</b>	Maximum pH reading: <u>7.36</u> pH	Average pH value: <u>7.26</u> pH
		Minimum pH reading: <u>7.15</u> pH	Standard deviation: <u>0.062</u> pH
		95 <sup>th</sup> percentile value: <u>7.35</u> pH	

**SURFACE WATER MONTHLY OPERATING REPORT**  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)  
P.O. BOX 13087, AUSTIN, TEXAS 78711-3087



**SURFACE WATER MONTHLY OPERATING REPORT**  
 FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES  
 OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER  
 Summary Page

PUBLIC WATER SYSTEM NAME: GULF COAST WATER AUTHORITY TX CITY PLANT NAME OR NUMBER: SWTP - THOMAS MACKEY WTP - BRAZOS  
 PWS ID No.: 0840153 I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.  
 Plant ID No.: 14813 Operator's Signature: [Signature]  
 Report for the Month of: June 2020 Certificate No. & Grade: WO0041290, A Date: July 6, 2020

TREATMENT PLANT PERFORMANCE			
Total number of turbidity readings:	<u>180</u>	Number of 4-hour periods when plant was off-line:	<u>0</u>
Number of readings above 0.10 NTU:	<u>0</u>	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	<u>0</u>
Number of readings above 0.3 NTU:	<u>0</u>	Number of days when plant was on-line but individual filter turbidity data was not collected:	<u>0</u>
Number of readings above 0.5 NTU:	<u>0</u>	Number of days with readings above 1.0 NTU:	<u>0</u> (2)
Number of readings above 1.0 NTU:	<u>0</u>	Number of days with readings above 5.0 NTU:	<u>0</u> (3)
Maximum allowable turbidity level:	<u>0.3</u>		
Percentage of readings above this limit:	<u>0.0</u> % (1)		
Number of days with a low CT for no more than 4.0 consecutive hours:	<u>0</u>	Average log inactivation for Giardia:	<u>5.62</u>
Number of days with a low CT for more than 4.0 consecutive hours:	<u>0</u> (4)	Average log inactivation for viruses:	<u>181.16</u>
Minimum disinfectant residual required leaving the plant:	<u>0.5</u> mg/L, measured as Total Chlorine	Number of days when profiling data was not collected:	<u>0</u>
Number of days with a low residual for no more than 4.0 consecutive hours:	<u>0</u>	Number of days when CT data was not collected:	<u>0</u>
Number of days with a low residual for more than 4.0 consecutive hours:	<u>0</u> (5)	Minimum pH in the last disinfection zone:	<u>7.09</u>
		Number of days with pH below 7.0 in the last disinfection zone:	<u>0.00</u>
		Number of days when disinfectant residual leaving the plant was not properly monitored:	<u>0</u>

DISTRIBUTION SYSTEM			
Minimum disinfectant residual required in distribution system:	<u>0.5</u> mg/L, measured as Total Chlorine		
Total number of readings this month:	<u>180</u> (at least 120 required) (8)	Percentage of readings with a low residual this month:	<u>0.0</u> % (6A)
Average disinfectant residual value:	<u>3.08</u>	Percentage of readings with a low residual last month:	<u>0.0</u> % (6B)
Number of readings with a low residual:	<u>0</u>		
Number of readings with no detectable residual:	<u>0</u>		

ADDITIONAL REPORTS & WORKSHEETS			
The Page 1 Addendum (Public Notices) is not required because there were no treatment technique or monitoring/reporting violations reported.			
Additional report(s) for individual filter monitoring required:	<input checked="" type="radio"/> NONE	<input type="radio"/> Filter Profile	<input type="radio"/> Filter Assessment
Additional report(s) for individual filter monitoring submitted:	<input checked="" type="radio"/> NONE	<input checked="" type="radio"/> Filter Profile (9)	<input type="radio"/> Filter Assessment (10)
No additional IFE Reports are required this month.			
		<input type="radio"/> CPE	<input type="radio"/> CPE (11)

STATISTICAL ANALYSIS OF TURBIDITY DATA				
Settled Water Statistical Summary	Maximum turbidity reading:	<u>1.67</u> NTU	Average turbidity value:	<u>0.60</u> NTU
	Minimum turbidity reading:	<u>0.14</u> NTU	Standard deviation:	<u>0.383</u> NTU
	95 <sup>th</sup> percentile value:	<u>1.37</u> NTU		
IFE Statistical Summary	Maximum IFE turbidity reading:	<u>0.14</u> NTU	Average IFE turbidity value:	<u>0.05</u> NTU
	Minimum IFE turbidity reading:	<u>0.02</u> NTU	Standard deviation:	<u>0.016</u> NTU
	95 <sup>th</sup> percentile IFE value:	<u>0.08</u> NTU		
CFE Statistical Summary	Maximum CFE turbidity reading:	<u>0.07</u> NTU	Average CFE turbidity value:	<u>0.04</u> NTU
	Minimum CFE turbidity reading:	<u>0.03</u> NTU	Standard deviation:	<u>0.006</u> NTU
	95 <sup>th</sup> percentile CFE value:	<u>0.05</u> NTU		

STATISTICAL ANALYSIS OF pH DATA				
Last Zone pH Statistical Summary	Maximum pH reading:	<u>7.30</u> pH	Average pH value:	<u>7.21</u> pH
	Minimum pH reading:	<u>7.09</u> pH	Standard deviation:	<u>0.055</u> pH
	95 <sup>th</sup> percentile value:	<u>7.29</u> pH		

**SURFACE WATER MONTHLY OPERATING REPORT**  
 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
 WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)  
 P.O. BOX 13087, AUSTIN, TEXAS 78711-3087



# SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES  
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER  
Summary Page

PUBLIC WATER SYSTEM NAME: GULF COAST WATER AUTHORITY TX CITY PLANT NAME OR NUMBER: SWTP - THOMAS MACKEY WTP - BRAZOS

PWS ID No.: 0840153 I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

Plant ID No.: 14813 Operator's Signature: [Signature]

Report for the Month of: July 2020 Certificate No. & Grade: WO0041290, A Date: August 5, 2020

## TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	<u>186</u>	Number of 4-hour periods when plant was off-line:	<u>0</u>
Number of readings above 0.10 NTU:	<u>0</u>	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	<u>0</u>
Number of readings above 0.3 NTU:	<u>0</u>	Number of days when plant was on-line but individual filter turbidity data was not collected:	<u>0</u>
Number of readings above 0.5 NTU:	<u>0</u>	Number of days with readings above 1.0 NTU:	<u>0</u> (2)
Number of readings above 1.0 NTU:	<u>0</u>	Number of days with readings above 5.0 NTU:	<u>0</u> (3)
Maximum allowable turbidity level:	<u>0.3</u>		
Percentage of readings above this limit:	<u>0.0</u> % (1)		
Number of days with a low CT for no more than 4.0 consecutive hours:	<u>0</u>	Average log inactivation for Giardia:	<u>5.46</u>
Number of days with a low CT for more than 4.0 consecutive hours:	<u>0</u> (4)	Average log inactivation for viruses:	<u>174.62</u>
		Number of days when profiling data was not collected:	<u>0</u>
		Number of days when CT data was not collected:	<u>0</u>
Minimum disinfectant residual required leaving the plant:	<u>0.5</u> mg/L, measured as Total Chlorine		
Number of days with a low residual for no more than 4.0 consecutive hours:	<u>0</u>	Minimum pH in the last disinfection zone:	<u>7.11</u>
Number of days with a low residual for more than 4.0 consecutive hours:	<u>0</u> (5)	Number of days with pH below 7.0 in the last disinfection zone:	<u>0.00</u>
		Number of days when disinfectant residual leaving the plant was not properly monitored:	<u>0</u>

## DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	<u>0.5</u> mg/L, measured as Total Chlorine
Total number of readings this month:	<u>186</u> (at least 120 required) (8)
Average disinfectant residual value:	<u>3.07</u>
Number of readings with a low residual:	<u>0</u>
Number of readings with no detectable residual:	<u>0</u>
Percentage of readings with a low residual this month:	<u>0.0</u> % (6A)
Percentage of readings with a low residual last month:	<u>0.0</u> % (6B)

## ADDITIONAL REPORTS & WORKSHEETS

The Page 1 Addendum (Public Notices) is not required because there were no treatment technique or monitoring/reporting violations reported.

Additional report(s) for individual filter monitoring required: ☒ NONE ☐ Filter Profile ☐ Filter Assessment ☐ CPE

Additional report(s) for individual filter monitoring submitted: ☒ NONE ☐ Filter Profile (9) ☐ Filter Assessment (10) ☐ CPE (11)

No additional IFE Reports are required this month.

## STATISTICAL ANALYSIS OF TURBIDITY DATA

Settled Water Statistical Summary	Maximum turbidity reading: <u>0.77</u> NTU	Average turbidity value: <u>0.31</u> NTU
	Minimum turbidity reading: <u>0.09</u> NTU	Standard deviation: <u>0.154</u> NTU
	95 <sup>th</sup> percentile value: <u>0.57</u> NTU	
IFE Statistical Summary	Maximum IFE turbidity reading: <u>0.15</u> NTU	Average IFE turbidity value: <u>0.05</u> NTU
	Minimum IFE turbidity reading: <u>0.03</u> NTU	Standard deviation: <u>0.014</u> NTU
	95 <sup>th</sup> percentile IFE value: <u>0.07</u> NTU	
CFE Statistical Summary	Maximum CFE turbidity reading: <u>0.06</u> NTU	Average CFE turbidity value: <u>0.05</u> NTU
	Minimum CFE turbidity reading: <u>0.03</u> NTU	Standard deviation: <u>0.005</u> NTU
	95 <sup>th</sup> percentile CFE value: <u>0.05</u> NTU	

## STATISTICAL ANALYSIS OF pH DATA

Last Zone pH Statistical Summary	Maximum pH reading: <u>7.33</u> pH	Average pH value: <u>7.23</u> pH
	Minimum pH reading: <u>7.11</u> pH	Standard deviation: <u>0.050</u> pH
	95 <sup>th</sup> percentile value: <u>7.31</u> pH	

**SURFACE WATER MONTHLY OPERATING REPORT**  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)  
P.O. BOX 13087, AUSTIN, TEXAS 78711-3087



# SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES  
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER

Summary Page

PUBLIC WATER  
SYSTEM NAME: GULF COAST WATER AUTHORITY TX CITY

PWS ID No.: 0840153

Plant ID No.: 14813

Report for the Month of: August 2020

PLANT NAME  
OR NUMBER: SWTP - THOMAS MACKEY WTP - BRAZOS

I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

Operator's Signature: *Antonio R. San*

Certificate No. & Grade: WO0041290, A

Date: September 3, 2020

## TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	<u>186</u>	Number of 4-hour periods when plant was off-line:	<u>0</u>
Number of readings above 0.10 NTU:	<u>0</u>	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	<u>0</u>
Number of readings above 0.3 NTU:	<u>0</u>	Number of days when plant was on-line but individual filter turbidity data was not collected:	<u>0</u>
Number of readings above 0.5 NTU:	<u>0</u>	Number of days with readings above 1.0 NTU:	<u>0</u> (2)
Number of readings above 1.0 NTU:	<u>0</u>	Number of days with readings above 5.0 NTU:	<u>0</u> (3)
Maximum allowable turbidity level:	<u>0.3</u>		
Percentage of readings above this limit:	<u>0.0</u> % (1)		
Number of days with a low CT for no more than 4.0 consecutive hours:	<u>0</u>	Average log inactivation for Giardia:	<u>5.27</u>
Number of days with a low CT for more than 4.0 consecutive hours:	<u>0</u> (4)	Average log inactivation for viruses:	<u>174.72</u>
		Number of days when profiling data was not collected:	<u>0</u>
		Number of days when CT data was not collected:	<u>0</u>
Minimum disinfectant residual required leaving the plant:	<u>0.5</u> mg/L, measured as Total Chlorine		
Number of days with a low residual for no more than 4.0 consecutive hours:	<u>0</u>	Minimum pH in the last disinfection zone:	<u>7.20</u>
Number of days with a low residual for more than 4.0 consecutive hours:	<u>0</u> (5)	Number of days with pH below 7.0 in the last disinfection zone:	<u>0.00</u>
		Number of days when disinfectant residual leaving the plant was not properly monitored:	<u>0</u>

## DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	<u>0.5</u> mg/L, measured as Total Chlorine
Total number of readings this month:	<u>186</u> (at least 120 required) (8)
Average disinfectant residual value:	<u>3.09</u>
Number of readings with a low residual:	<u>0</u>
Number of readings with no detectable residual:	<u>0</u>
Percentage of readings with a low residual this month:	<u>0.0</u> % (6A)
Percentage of readings with a low residual last month:	<u>0.0</u> % (6B)

## ADDITIONAL REPORTS & WORKSHEETS

The Page 1 Addendum (Public Notices) is not required because there were no treatment technique or monitoring/reporting violations reported.

Additional report(s) for individual filter monitoring required: ☒ NONE ☐ Filter Profile ☐ Filter Assessment ☐ CPE

Additional report(s) for individual filter monitoring submitted: ☒ NONE ☐ Filter Profile (9) ☐ Filter Assessment (10) ☐ CPE (11)

No additional IFE Reports are required this month.

## STATISTICAL ANALYSIS OF TURBIDITY DATA

Settled Water Stastical Summary	Maximum turbidity reading: <u>0.80</u> NTU	Average turbidity value: <u>0.30</u> NTU
	Minimum turbidity reading: <u>0.12</u> NTU	Standard deviation: <u>0.138</u> NTU
	95 <sup>th</sup> percentile value: <u>0.56</u> NTU	
IFE Stastical Summary	Maximum IFE turbidity reading: <u>0.15</u> NTU	Average IFE turbidity value: <u>0.05</u> NTU
	Minimum IFE turbidity reading: <u>0.03</u> NTU	Standard deviation: <u>0.016</u> NTU
	95 <sup>th</sup> percentile IFE value: <u>0.08</u> NTU	
CFE Stastical Summary	Maximum CFE turbidity reading: <u>0.06</u> NTU	Average CFE turbidity value: <u>0.05</u> NTU
	Minimum CFE turbidity reading: <u>0.04</u> NTU	Standard deviation: <u>0.005</u> NTU
	95 <sup>th</sup> percentile CFE value: <u>0.06</u> NTU	

## STATISTICAL ANALYSIS OF pH DATA

Last Zone pH Stastical Summary	Maximum pH reading: <u>7.40</u> pH	Average pH value: <u>7.28</u> pH
	Minimum pH reading: <u>7.20</u> pH	Standard deviation: <u>0.048</u> pH
	95 <sup>th</sup> percentile value: <u>7.30</u> pH	

**SURFACE WATER MONTHLY OPERATING REPORT**  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)  
P.O. BOX 13087, AUSTIN, TEXAS 78711-3087



# SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES  
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER

Summary Page

PUBLIC WATER SYSTEM NAME: GULF COAST WATER AUTHORITY TX CITY PLANT NAME OR NUMBER: SWTP - THOMAS MACKEY WTP - BRAZOS

PWS ID No.: 0840153 I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

Plant ID No.: 14813 Operator's Signature: [Signature]

Report for the Month of: September 2020 Certificate No. & Grade: WO0041290, A Date: October 2, 2020

## TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	<u>180</u>	Number of 4-hour periods when plant was off-line:	<u>0</u>
Number of readings above 0.10 NTU:	<u>0</u>	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	<u>0</u>
Number of readings above 0.3 NTU:	<u>0</u>	Number of days when plant was on-line but individual filter turbidity data was not collected:	<u>0</u>
Number of readings above 0.5 NTU:	<u>0</u>	Number of days with readings above 1.0 NTU:	<u>0</u> (2)
Number of readings above 1.0 NTU:	<u>0</u>	Number of days with readings above 5.0 NTU:	<u>0</u> (3)
Maximum allowable turbidity level:	<u>0.3</u>		
Percentage of readings above this limit:	<u>0.0</u> % (1)		
Number of days with a low CT for no more than 4.0 consecutive hours:	<u>0</u>	Average log inactivation for Giardia:	<u>5.37</u>
Number of days with a low CT for more than 4.0 consecutive hours:	<u>0</u> (4)	Average log inactivation for viruses:	<u>177.59</u>
		Number of days when profiling data was not collected:	<u>0</u>
		Number of days when CT data was not collected:	<u>0</u>
Minimum disinfectant residual required leaving the plant:	<u>0.5</u> mg/L, measured as Total Chlorine		
Number of days with a low residual for no more than 4.0 consecutive hours:	<u>0</u>	Minimum pH in the last disinfection zone:	<u>7.12</u>
Number of days with a low residual for more than 4.0 consecutive hours:	<u>0</u> (5)	Number of days with pH below 7.0 in the last disinfection zone:	<u>0.00</u>
		Number of days when disinfectant residual leaving the plant was not properly monitored:	<u>0</u>

## DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	<u>0.5</u> mg/L, measured as Total Chlorine
Total number of readings this month:	<u>186</u> (at least 120 required) (8)
Average disinfectant residual value:	<u>3.13</u>
Number of readings with a low residual:	<u>0</u>
Number of readings with no detectable residual:	<u>0</u>
Percentage of readings with a low residual this month:	<u>0.0</u> % (6A)
Percentage of readings with a low residual last month:	<u>0.0</u> % (6B)

## ADDITIONAL REPORTS & WORKSHEETS

The Page 1 Addendum (Public Notices) is not required because there were no treatment technique or monitoring/reporting violations reported.

Additional report(s) for individual filter monitoring required: ☒ NONE ☐ Filter Profile ☐ Filter Assessment ☐ CPE

Additional report(s) for individual filter monitoring submitted: ☒ NONE ☐ Filter Profile (9) ☐ Filter Assessment (10) ☐ CPE (11)

No additional IFE Reports are required this month.

## STATISTICAL ANALYSIS OF TURBIDITY DATA

Settled Water Statistical Summary	Maximum turbidity reading:	<u>0.74</u> NTU	Average turbidity value:	<u>0.28</u> NTU
	Minimum turbidity reading:	<u>0.10</u> NTU	Standard deviation:	<u>0.119</u> NTU
	95 <sup>th</sup> percentile value:	<u>0.48</u> NTU		
IFE Statistical Summary	Maximum IFE turbidity reading:	<u>0.17</u> NTU	Average IFE turbidity value:	<u>0.06</u> NTU
	Minimum IFE turbidity reading:	<u>0.03</u> NTU	Standard deviation:	<u>0.021</u> NTU
	95 <sup>th</sup> percentile IFE value:	<u>0.10</u> NTU		
CFE Statistical Summary	Maximum CFE turbidity reading:	<u>0.08</u> NTU	Average CFE turbidity value:	<u>0.05</u> NTU
	Minimum CFE turbidity reading:	<u>0.03</u> NTU	Standard deviation:	<u>0.009</u> NTU
	95 <sup>th</sup> percentile CFE value:	<u>0.07</u> NTU		

## STATISTICAL ANALYSIS OF pH DATA

Last Zone pH Statistical Summary	Maximum pH reading:	<u>7.49</u> pH	Average pH value:	<u>7.30</u> pH
	Minimum pH reading:	<u>7.12</u> pH	Standard deviation:	<u>0.069</u> pH
	95 <sup>th</sup> percentile value:	<u>7.41</u> pH		

**SURFACE WATER MONTHLY OPERATING REPORT**  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)  
P.O. BOX 13087, AUSTIN, TEXAS 78711-3087



# SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES  
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER

Summary Page

**PUBLIC WATER**

SYSTEM NAME: GULF COAST WATER AUTHORITY TX CITY

**PLANT NAME**

OR NUMBER:

SWTP - THOMAS MACKEY WTP - BRAZOS

I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

PWS ID No.: 0840153

Plant ID No.: 14813

Operator's Signature: *Antonio A. San*

Report for the Month of: October 2020

Certificate No. & Grade: WO0041290, A

Date: November 5, 2020

## TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	<u>186</u>	Number of 4-hour periods when plant was off-line:	<u>0</u>
Number of readings above 0.10 NTU:	<u>0</u>	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	<u>0</u>
Number of readings above 0.3 NTU:	<u>0</u>	Number of days when plant was on-line but individual filter turbidity data was not collected:	<u>0</u>
Number of readings above 0.5 NTU:	<u>0</u>	Number of days with readings above 1.0 NTU:	<u>0</u> (2)
Number of readings above 1.0 NTU:	<u>0</u>	Number of days with readings above 5.0 NTU:	<u>0</u> (3)
Maximum allowable turbidity level:	<u>0.3</u>		
Percentage of readings above this limit:	<u>0.0</u> % (1)		
Number of days with a low CT for no more than 4.0 consecutive hours:	<u>0</u>	Average log inactivation for Giardia:	<u>4.30</u>
Number of days with a low CT for more than 4.0 consecutive hours:	<u>0</u> (4)	Average log inactivation for viruses:	<u>128.08</u>
Minimum disinfectant residual required leaving the plant:	<u>0.5</u> mg/L, measured as Total Chlorine	Number of days when profiling data was not collected:	<u>0</u>
Number of days with a low residual for no more than 4.0 consecutive hours:	<u>0</u>	Number of days when CT data was not collected:	<u>0</u>
Number of days with a low residual for more than 4.0 consecutive hours:	<u>0</u> (5)	Minimum pH in the last disinfection zone:	<u>7.00</u>
		Number of days with pH below 7.0 in the last disinfection zone:	<u>0.00</u>
		Number of days when disinfectant residual leaving the plant was not properly monitored:	<u>0</u>

## DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	<u>0.5</u> mg/L, measured as Total Chlorine
Total number of readings this month:	<u>186</u> (at least 120 required) (8)
Average disinfectant residual value:	<u>3.14</u>
Percentage of readings with a low residual this month:	<u>0.0</u> % (6A)
Number of readings with a low residual:	<u>0</u>
Percentage of readings with a low residual last month:	<u>0.0</u> % (6B)
Number of readings with no detectable residual:	<u>0</u>

## ADDITIONAL REPORTS & WORKSHEETS

The Page 1 Addendum (Public Notices) is not required because there were no treatment technique or monitoring/reporting violations reported.

Additional report(s) for individual filter monitoring required: ☒ NONE ☐ Filter Profile ☐ Filter Assessment ☐ CPE

Additional report(s) for individual filter monitoring submitted: ☒ NONE ☐ Filter Profile (9) ☐ Filter Assessment (10) ☐ CPE (11)

No additional IFE Reports are required this month.

## STATISTICAL ANALYSIS OF TURBIDITY DATA

Settled Water Statistical Summary	Maximum turbidity reading:	<u>0.99</u> NTU	Average turbidity value:	<u>0.33</u> NTU
	Minimum turbidity reading:	<u>0.12</u> NTU	Standard deviation:	<u>0.122</u> NTU
	95 <sup>th</sup> percentile value:	<u>0.47</u> NTU		
IFE Statistical Summary	Maximum IFE turbidity reading:	<u>0.14</u> NTU	Average IFE turbidity value:	<u>0.05</u> NTU
	Minimum IFE turbidity reading:	<u>0.03</u> NTU	Standard deviation:	<u>0.018</u> NTU
	95 <sup>th</sup> percentile IFE value:	<u>0.08</u> NTU		
CFE Statistical Summary	Maximum CFE turbidity reading:	<u>0.07</u> NTU	Average CFE turbidity value:	<u>0.04</u> NTU
	Minimum CFE turbidity reading:	<u>0.03</u> NTU	Standard deviation:	<u>0.006</u> NTU
	95 <sup>th</sup> percentile CFE value:	<u>0.05</u> NTU		

## STATISTICAL ANALYSIS OF pH DATA

Last Zone pH Statistical Summary	Maximum pH reading:	<u>7.29</u> pH	Average pH value:	<u>7.09</u> pH
	Minimum pH reading:	<u>7.00</u> pH	Standard deviation:	<u>0.075</u> pH
	95 <sup>th</sup> percentile value:	<u>7.22</u> pH		

# SURFACE WATER MONTHLY OPERATING REPORT

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)  
P.O. BOX 13087, AUSTIN, TEXAS 78711-3087



# SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES  
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER

Summary Page

**PUBLIC WATER**

SYSTEM NAME: GULF COAST WATER AUTHORITY TX CITY

**PLANT NAME**

OR NUMBER:

SWTP - THOMAS MACKEY WTP - BRAZOS

I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

PWS ID No.: 0840153

Plant ID No.: 14813

Operator's Signature: *Antonio J. Jara*

Report for  
the Month of: November 2020

Certificate No. & Grade: WO0041290, A

Date: December 3, 2020

## TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	<u>180</u>	Number of 4-hour periods when plant was off-line:	<u>0</u>
Number of readings above 0.10 NTU:	<u>0</u>	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	<u>0</u>
Number of readings above 0.3 NTU:	<u>0</u>	Number of days when plant was on-line but individual filter turbidity data was not collected:	<u>0</u>
Number of readings above 0.5 NTU:	<u>0</u>	Number of days with readings above 1.0 NTU:	<u>0</u> (2)
Number of readings above 1.0 NTU:	<u>0</u>	Number of days with readings above 5.0 NTU:	<u>0</u> (3)
Maximum allowable turbidity level:	<u>0.3</u>		
Percentage of readings above this limit:	<u>0.0</u> % (1)		
Number of days with a low CT for no more than 4.0 consecutive hours:	<u>0</u>	Average log inactivation for Giardia:	<u>3.55</u>
Number of days with a low CT for more than 4.0 consecutive hours:	<u>0</u> (4)	Average log inactivation for viruses:	<u>107.50</u>
Minimum disinfectant residual required leaving the plant:	<u>0.5</u> mg/L, measured as Total Chlorine	Number of days when profiling data was not collected:	<u>0</u>
Number of days with a low residual for no more than 4.0 consecutive hours:	<u>0</u>	Number of days when CT data was not collected:	<u>0</u>
Number of days with a low residual for more than 4.0 consecutive hours:	<u>0</u> (5)		
		Minimum pH in the last disinfection zone:	<u>7.01</u>
		Number of days with pH below 7.0 in the last disinfection zone:	<u>0.00</u>
		Number of days when disinfectant residual leaving the plant was not properly monitored:	<u>0</u>

## DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	<u>0.5</u> mg/L, measured as Total Chlorine		
Total number of readings this month:	<u>180</u> (at least 120 required) (8)	Percentage of readings with a low residual this month:	<u>0.0</u> % (6A)
Average disinfectant residual value:	<u>3.10</u>	Percentage of readings with a low residual last month:	<u>0.0</u> % (6B)
Number of readings with a low residual:	<u>0</u>		
Number of readings with no detectable residual:	<u>0</u>		

## ADDITIONAL REPORTS & WORKSHEETS

The Page 1 Addendum (Public Notices) is not required because there were no treatment technique or monitoring/reporting violations reported.

Additional report(s) for individual filter monitoring required: ☒ NONE ☐ Filter Profile ☐ Filter Assessment ☐ CPE

Additional report(s) for individual filter monitoring submitted: ☒ NONE ☐ Filter Profile (9) ☐ Filter Assessment (10) ☐ CPE (11)

No additional IFE Reports are required this month.

## STATISTICAL ANALYSIS OF TURBIDITY DATA

Settled Water Statistical Summary	Maximum turbidity reading:	<u>0.49</u> NTU	Average turbidity value:	<u>0.22</u> NTU
	Minimum turbidity reading:	<u>0.14</u> NTU	Standard deviation:	<u>0.064</u> NTU
	95 <sup>th</sup> percentile value:	<u>0.36</u> NTU		
IFE Statistical Summary	Maximum IFE turbidity reading:	<u>0.34</u> NTU	Average IFE turbidity value:	<u>0.05</u> NTU
	Minimum IFE turbidity reading:	<u>0.02</u> NTU	Standard deviation:	<u>0.021</u> NTU
	95 <sup>th</sup> percentile IFE value:	<u>0.07</u> NTU		
CFE Statistical Summary	Maximum CFE turbidity reading:	<u>0.06</u> NTU	Average CFE turbidity value:	<u>0.04</u> NTU
	Minimum CFE turbidity reading:	<u>0.03</u> NTU	Standard deviation:	<u>0.007</u> NTU
	95 <sup>th</sup> percentile CFE value:	<u>0.05</u> NTU		

## STATISTICAL ANALYSIS OF pH DATA

Last Zone pH Statistical Summary	Maximum pH reading:	<u>7.80</u> pH	Average pH value:	<u>7.16</u> pH
	Minimum pH reading:	<u>7.01</u> pH	Standard deviation:	<u>0.140</u> pH
	95 <sup>th</sup> percentile value:	<u>7.28</u> pH		

**SURFACE WATER MONTHLY OPERATING REPORT**  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)  
P.O. BOX 13087, AUSTIN, TEXAS 78711-3087



# SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES  
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER

## Summary Page

**PUBLIC WATER**

SYSTEM NAME: GULF COAST WATER AUTHORITY TX CITY

**PLANT NAME**

OR NUMBER:

SWTP - THOMAS MACKEY WTP - BRAZOS

I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

PWS ID No.: 0840153

Plant ID No.: 14813

Operator's Signature: *Christina A. Smith*

Report for the Month of: December 2020

Certificate No. & Grade: WO0041290, A

Date: January 6, 2021

### TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	<u>186</u>	Number of 4-hour periods when plant was off-line:	<u>0</u>
Number of readings above 0.10 NTU:	<u>0</u>	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	<u>0</u>
Number of readings above 0.3 NTU:	<u>0</u>	Number of days when plant was on-line but individual filter turbidity data was not collected:	<u>0</u>
Number of readings above 0.5 NTU:	<u>0</u>	Number of days with readings above 1.0 NTU:	<u>0</u> (2)
Number of readings above 1.0 NTU:	<u>0</u>	Number of days with readings above 5.0 NTU:	<u>0</u> (3)
Maximum allowable turbidity level:	<u>0.3</u>		
Percentage of readings above this limit:	<u>0.0</u> % (1)		
Number of days with a low CT for no more than 4.0 consecutive hours:	<u>0</u>	Average log inactivation for Giardia:	<u>2.78</u>
Number of days with a low CT for more than 4.0 consecutive hours:	<u>0</u> (4)	Average log inactivation for viruses:	<u>87.97</u>
		Number of days when profiling data was not collected:	<u>0</u>
		Number of days when CT data was not collected:	<u>0</u>
Minimum disinfectant residual required leaving the plant:	<u>0.5</u> mg/L, measured as Total Chlorine		
Number of days with a low residual for no more than 4.0 consecutive hours:	<u>0</u>	Minimum pH in the last disinfection zone:	<u>7.20</u>
Number of days with a low residual for more than 4.0 consecutive hours:	<u>0</u> (5)	Number of days with pH below 7.0 in the last disinfection zone:	<u>0.00</u>
		Number of days when disinfectant residual leaving the plant was not properly monitored:	<u>0</u>

### DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	<u>0.5</u> mg/L, measured as Total Chlorine		
Total number of readings this month:	<u>186</u> (at least 120 required) (8)	Percentage of readings with a low residual this month:	<u>0.0</u> % (6A)
Average disinfectant residual value:	<u>3.09</u>	Percentage of readings with a low residual last month:	<u>0.0</u> % (6B)
Number of readings with a low residual:	<u>0</u>		
Number of readings with no detectable residual:	<u>0</u>		

### ADDITIONAL REPORTS & WORKSHEETS

The Page 1 Addendum (Public Notices) is not required because there were no treatment technique or monitoring/reporting violations reported.			
Additional report(s) for individual filter monitoring required:	<input checked="" type="radio"/> NONE	<input type="radio"/> Filter Profile	<input type="radio"/> Filter Assessment
Additional report(s) for individual filter monitoring submitted:	<input checked="" type="radio"/> NONE	<input type="radio"/> Filter Profile (9)	<input type="radio"/> Filter Assessment (10)
No additional IFE Reports are required this month.			
		<input type="radio"/> CPE	<input type="radio"/> CPE (11)

### STATISTICAL ANALYSIS OF TURBIDITY DATA

Settled Water Statistical Summary	Maximum turbidity reading:	<u>0.60</u> NTU	Average turbidity value:	<u>0.26</u> NTU
	Minimum turbidity reading:	<u>0.09</u> NTU	Standard deviation:	<u>0.089</u> NTU
	95 <sup>th</sup> percentile value:	<u>0.42</u> NTU		
IFE Statistical Summary	Maximum IFE turbidity reading:	<u>0.19</u> NTU	Average IFE turbidity value:	<u>0.05</u> NTU
	Minimum IFE turbidity reading:	<u>0.03</u> NTU	Standard deviation:	<u>0.025</u> NTU
	95 <sup>th</sup> percentile IFE value:	<u>0.09</u> NTU		
CFE Statistical Summary	Maximum CFE turbidity reading:	<u>0.09</u> NTU	Average CFE turbidity value:	<u>0.05</u> NTU
	Minimum CFE turbidity reading:	<u>0.03</u> NTU	Standard deviation:	<u>0.012</u> NTU
	95 <sup>th</sup> percentile CFE value:	<u>0.08</u> NTU		

### STATISTICAL ANALYSIS OF pH DATA

Last Zone pH Statistical Summary	Maximum pH reading:	<u>7.36</u> pH	Average pH value:	<u>7.27</u> pH
	Minimum pH reading:	<u>7.20</u> pH	Standard deviation:	<u>0.039</u> pH
	95 <sup>th</sup> percentile value:	<u>7.33</u> pH		

## SURFACE WATER MONTHLY OPERATING REPORT

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)  
P.O. BOX 13087, AUSTIN, TEXAS 78711-3087





# Texas Department of State Health Services

LABORATORY SERVICES SECTION, MC-1947  
1100 W. 49th St., Austin, Tx. 78756 (512)458-7587

PO BOX 149347  
AUSTIN, TEXAS 78714-9347  
1-888-963-7111  
www.dshs.state.tx.us

## \*SINGLE MINERAL Analysis Report

Submitter Identification Number: 0840153

GULF COAST WATER AUTHORITY TX CITY  
JONES, RUSSELL, C  
3630 HIGHWAY 1765  
TEXAS CITY, TX 77591-4824

Date Reported : 02/20/2020

Report ID# : 20200220105420AE97238

Lab Sample ID# : AE97238

Water Source :

Date Collected : 02/06/2020 11:32

Sample Priority : NORMAL

Entry Point(s) : EP001

Date Received : 02/07/2020

TCEQ ID#(s) : 2031359

Sample Cond. : Acceptable

Analyte	Result	Unit	Method	Date/Time Analyzed	Analyst
Total Cyanide <sup>1</sup>	0.12	mg/L	10-204-00-1-X	02/13/2020 12:07	MD

### Comments:

The test results on this report relate only to the sample identified on this report. The test results for analytes noted(<sup>1</sup>) meet all TNI (2009 Standard) requirements.

Authorized by Team Lead HNGO on 02/19/2020





# Texas Department of State Health Services

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1100 W. 49th St., Austin, Tx. 78756 (512)458-7587

PO BOX 149347  
AUSTIN, TEXAS 78714-9347  
1-888-963-7111  
www.dshs.state.tx.us

## \*ALL METALS Analysis Report

Submitter Identification Number: 0840153

GULF COAST WATER AUTHORITY TX CITY  
JONES, RUSSELL, C  
3630 HIGHWAY 1765  
TEXAS CITY, TX 77591-4824

Date Reported : 02/20/2020

Report ID# : 20200220105420AE97259

Lab Sample ID# : AE97259

Water Source :

Date Collected : 02/06/2020 11:31

Sample Priority : NORMAL

Entry Point(s) : EP001

Date Received : 02/07/2020

TCEQ ID#(s) : 2014297

Sample Cond. : Acceptable

Analyte	Result	Unit	Method	Date/Time Analyzed	Analyst
Acidification	Completed		EPA 200.2	02/07/2020	BF
pH Check	Completed		EPA 200.2	02/10/2020	TH
Turbidity Screen	Completed		SM 2130B	02/10/2020	TH
Visible Particles	Completed			02/10/2020	TH
Total Hardness as CaCO3 by Calculation	173	mg/L	SM 2340B	02/10/2020	BF
Aluminum <sup>1</sup>	< 0.0200	mg/L	EPA 200.8	02/11/2020	AS
Antimony <sup>1</sup>	< 0.0010	mg/L	EPA 200.8	02/11/2020	AS
Arsenic <sup>1</sup>	< 0.0020	mg/L	EPA 200.8	02/11/2020	AS
Barium <sup>1</sup>	0.107	mg/L	EPA 200.8	02/11/2020	AS
Beryllium <sup>1</sup>	< 0.00080	mg/L	EPA 200.8	02/11/2020	AS
Cadmium <sup>1</sup>	< 0.0010	mg/L	EPA 200.8	02/11/2020	AS
Calcium	49.0	mg/L	EPA 200.7	02/10/2020	BF
Chromium <sup>1</sup>	< 0.0100	mg/L	EPA 200.8	02/11/2020	AS
Copper <sup>1</sup>	0.0078	mg/L	EPA 200.8	02/11/2020	AS
Iron <sup>1</sup>	< 0.010	mg/L	EPA 200.7	02/10/2020	BF
Lead <sup>1</sup>	< 0.0010	mg/L	EPA 200.8	02/11/2020	AS
Magnesium <sup>1</sup>	12.4	mg/L	EPA 200.7	02/10/2020	BF
Manganese <sup>1</sup>	< 0.0010	mg/L	EPA 200.8	02/11/2020	AS
Mercury <sup>1</sup>	< 0.00040	mg/L	EPA 245.1	02/14/2020	BF
Nickel <sup>1</sup>	0.0028	mg/L	EPA 200.8	02/11/2020	AS
Potassium <sup>1</sup>	4.84	mg/L	EPA 200.7	02/10/2020	BF
Selenium <sup>1</sup>	< 0.0030	mg/L	EPA 200.8	02/11/2020	AS
Silver <sup>1</sup>	< 0.0100	mg/L	EPA 200.8	02/11/2020	AS
Sodium <sup>1</sup>	55.5	mg/L	EPA 200.7	02/10/2020	BF
Thallium <sup>1</sup>	< 0.00040	mg/L	EPA 200.8	02/11/2020	AS
Zinc <sup>1</sup>	0.142	mg/L	EPA 200.8	02/11/2020	AS

### Comments:

The test results on this report relate only to the sample identified on this report. The test results for analytes noted(<sup>1</sup>) meet all TNI (2009 Standard) requirements.

Authorized by Team Lead EBOYER on 02/18/2020





## Texas Department of State Health Services

LABORATORY SERVICES SECTION, MC-1947  
1100 W. 49th St., Austin, Tx. 78756 (512)458-7587

PO BOX 149347  
AUSTIN, TEXAS 78714-9347  
1-888-963-7111  
www.dshs.state.tx.us

### \*ALL MINERALS

### Analysis Report

Submitter Identification Number: 0840153

GULF COAST WATER AUTHORITY TX CITY  
JONES, RUSSELL, C  
3630 HIGHWAY 1765  
TEXAS CITY, TX 77591-4824

Date Reported : 02/25/2020

Report ID# : 20200225140512AE97229

Lab Sample ID# : AE97229

Water Source :

Date Collected : 02/06/2020 11:32

Sample Priority : NORMAL

Entry Point(s) : EP001

Date Received : 02/07/2020

TCEQ ID#(s) : 2016961

Sample Cond. : Acceptable

Analyte	Result	Unit	Method	Date/Time Analyzed	Analyst
Field pH Result	7.9	pH			
Diluted Conductance @ 25.0 °C <sup>1</sup>	707	µmho/cm	SM 2510 B	02/11/2020 08:30	AD
Phenolphthalein Alkalinity as CaCO <sub>3</sub>	<2	mg/L	SM 2320B	02/07/2020 15:13	NP
Total Alkalinity as CaCO <sub>3</sub>	153	mg/L	SM 2320B	02/07/2020 15:13	NP
Bicarbonate	187	mg/L	SM 2320B	02/07/2020 15:13	NP
Carbonate	<2	mg/L	SM 2320B	02/07/2020 15:13	NP
Fluoride <sup>1</sup>	0.38	mg/L	EPA 300.0	02/14/2020 18:22	NP
Chloride <sup>1</sup>	77	mg/L	EPA 300.0	02/19/2020 12:17	NP
Sulfate <sup>1</sup>	68	mg/L	EPA 300.0	02/14/2020 18:22	NP
Total Dissolved Solids <sup>1</sup>	371	mg/L	SM 2540C	02/10/2020 08:12	AD
Nitrate as N <sup>1</sup>	0.50	mg/L	EPA 353.2	02/07/2020 14:10	NP

#### Comments:

The test results on this report relate only to the sample identified on this report. The test results for analytes noted<sup>(1)</sup> meet all TNI (2009 Standard) requirements.

Authorized by Team Lead HNGO on 02/21/2020





# Texas Department of State Health Services

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## Semivolatiles Organic Analysis Report

Submitter Identification Number: 0840153

GULF COAST WATER AUTHORITY TX CITY  
JONES, RUSSELL, C  
3630 HIGHWAY 1765  
TEXAS CITY, TX 77591-4824

Date Reported : 03/05/2020

Report ID# : 20200305095232AE97406

Lab Sample ID# : AE97406      Water Source :  
Sample Priority : NORMAL      Entry Point(s) : EP001  
TCEQ ID#(s) : 2009474

Date Collected : 02/06/2020 11:30      Conc. Units : µg/L  
Date Received : 02/07/2020      Method : EPA 525.2  
Date Analyzed : 02/13/2020      Analyst : KL  
Extraction Date : 02/12/2020      Sample Cond. : Acceptable

Regulated Compounds	Result	Qualifier	Monitored Compounds continued	Result	Qualifier
Alachlor <sup>1</sup>	<0.2		Dimethylphthalate	<2.0	
Atrazine <sup>1</sup>	0.11	N	Fluorene	<0.20	
Benzo[a]pyrene <sup>1</sup>	<0.02		2,2',3,3',4,4',6-Heptachlorobiphenyl	<0.50	
alpha-Chlordane	<0.2		2,2',4,4',5,6'-Hexachlorobiphenyl	<0.20	
gamma-Chlordane	<0.2		Indeno[1,2,3-cd]pyrene	<0.20	
trans-Nonachlor	<0.2		Metolachlor	<0.20	
Di(2-ethylhexyl) adipate <sup>1</sup>	<0.6		Metribuzin	<0.20	
Di(2-ethylhexyl) phthalate <sup>1</sup>	<0.6		Naphthalene	<0.20	
Heptachlor <sup>1</sup>	<0.04		2,2',3,3',4,5',6'-Octachlorobiphenyl	<0.50	
Hexachlorobenzene <sup>1</sup>	<0.1		2,2',3',4,6-Pentachlorobiphenyl	<0.20	
Hexachlorocyclopentadiene <sup>1</sup>	<0.1	*	Phenanthrene	<0.20	
Lindane <sup>1</sup>	<0.02		Propachlor	<0.20	
Methoxychlor <sup>1</sup>	<0.1		Pyrene	<0.20	
Simazine <sup>1</sup>	<0.07		2,2',4,4'-Tetrachlorobiphenyl	<0.20	
Monitored Compounds	Result	Qualifier	2,4,5-Trichlorobiphenyl	<0.20	
Acenaphthene	<0.20		Trifluralin	<0.20	
Acenaphthylene	<0.20		<b>Comments:</b>		
Aldrin	<0.20		N - See sample comments.		
Anthracene	<0.20		* - This analyte has known instability and/or method performance issues and quantitation should be considered approximate.		
Benzo(a)anthracene	<0.20		EPA M525.2: presence of atrazine confirmed by previous analyses per the Texas Drinking Water watch website. The test results on this report relate only to the sample identified on this report. The test results for analytes noted(1) meet all TNI (2009 Standard) requirements.		
Benzo[b]fluoranthene	<0.20		Authorized by Team Lead AVINYARD on 03/04/2020		
Benzo[g,h,i]perylene	<0.20				
Benzo[k]fluoranthene	<0.20				
Bromacil	<0.20				
Butachlor	<0.20				
Butylbenzylphthalate	<2.0				
2-Chlorobiphenyl	<0.20				
Chrysene	<0.20				
Dibenz[a,h]anthracene	<0.20				
Di-n-butylphthalate	<2.0				
2,3-Dichlorobiphenyl	<0.20				
Dieldrin	<0.20				
Diethylphthalate	<2.0				





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## Pesticides by Method 508.1 Analysis Report

Submitter Identification Number: 0840153

GULF COAST WATER AUTHORITY TX CITY  
JONES, RUSSELL, C  
3630 HIGHWAY 1765  
TEXAS CITY, TX 77591-4824

Date Reported : 03/05/2020

Report ID# : 20200305095232AE97406

Lab Sample ID# : AE97406  
Sample Priority : NORMAL  
TCEQ ID#(s) : 2009474

Water Source :  
Entry Point(s) : EP001

Date Collected : 02/06/2020 11:30  
Date Received : 02/07/2020  
Date Analyzed : 02/19/2020

Conc. Units : ug/L  
Method : 508.1 Rev. 2.0  
Analyst : JH  
Sample Cond. : Acceptable

Regulated Compounds	Result	Qualifier
Chlordane <sup>1</sup>	<0.20	
Endrin <sup>1</sup>	<0.01	
Heptachlor epoxide <sup>1</sup>	<0.02	
Toxaphene <sup>1</sup>	<1.0	

### Comments:

EPA M525.2: presence of atrazine confirmed by previous analyses per the Texas Drinking Water watch website. The test results on this report relate only to the sample identified on this report. The test results for analytes noted(<sup>1</sup>) meet all TNI (2009 Standard) requirements.

Authorized by Team Lead AVINYARD on 03/04/2020





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### Trihalomethanes by GC/MS Analysis Report

Submitter Identification Number: 0840153

GULF COAST WATER AUTHORITY TX CITY  
JONES, RUSSELL, C  
3630 HIGHWAY 1765  
TEXAS CITY, TX 77591-4824

Date Reported : 06/11/2020

Report ID# : 20200611094017AF12323

Lab Sample ID# : AF12323  
Sample Priority : NORMAL  
TCEQ ID#(s) : 2054957

Water Source :  
Entry Point(s) : DBP2-01

Date Collected : 05/21/2020 09:36  
Date Received : 05/22/2020  
Date Analyzed : 06/02/2020

Conc. Units : µg/L  
Method : EPA 524.2  
Analyst : KL  
Sample Cond. : Acceptable

Trihalomethanes	Result	Qualifier
Chloroform	4.4	
Bromodichloromethane	10.5	
Dibromochloromethane	15.0	
Bromoform	5.9	
Total Trihalomethanes <sup>1</sup>	35.8	

#### Comments:

The test results on this report relate only to the sample identified on this report. The test results for analytes noted(\*) meet all TNI (2009 Standard) requirements.

Authorized by Group Manager TDUNN on 06/09/2020





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### Haloacetic Acids Analysis Report

Submitter Identification Number: 0840153

GULF COAST WATER AUTHORITY TX CITY  
JONES, RUSSELL, C  
3630 HIGHWAY 1765  
TEXAS CITY, TX 77591-4824

Date Reported : 06/11/2020

Report ID# : 20200611094017AF12323

Lab Sample ID# : AF12323  
Sample Priority : NORMAL  
TCEQ ID#(s) : 2054957

Water Source :  
Entry Point(s) : DBP2-01

Date Collected : 05/21/2020 09:36  
Date Received : 05/22/2020  
Date Analyzed : 05/30/2020  
Extraction Date : 05/28/2020  
Conc. Units : µg/L  
Method : 552.2 Rev 1.0  
Analyst : BF  
Sample Cond. : Acceptable

Regulated Compounds	Result	Qualifier
Monochloroacetic acid	<2.0	
Dichloroacetic acid	4.9	
Trichloroacetic acid	1.8	
Monobromoacetic acid	<1.0	
Dibromoacetic acid	4.9	
Total HAA5 <sup>1</sup>	11.6	
Monitored Compounds	Result	Qualifier
Bromochloroacetic acid	4.8	
Dalapon	<1.0	

#### Comments:

The test results on this report relate only to the sample identified on this report. The test results for analytes noted<sup>(1)</sup> meet all TNI (2009 Standard) requirements.

Authorized by Group Manager TDUNN on 06/09/2020





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## Volatile Organic Compounds by GC/MS Analysis Report

Submitter Identification Number: 0840153

GULF COAST WATER AUTHORITY TX CITY  
JONES, RUSSELL, C  
3630 HIGHWAY 1765  
TEXAS CITY, TX 77591-4824

Date Reported : 08/13/2020

Report ID# : 20200813091200AF19499

Lab Sample ID# : AF19499  
Sample Priority : NORMAL  
TCEQ ID#(s) : 2007049

Water Source :  
Entry Point(s) : EP001

Date Collected : 07/15/2020 11:35  
Date Received : 07/16/2020  
Date Analyzed : 07/24/2020

Conc. Units : µg/L  
Method : EPA 524.2  
Analyst : TB  
Sample Cond. : Acceptable

Regulated Cmpds.[40 CFR 141.61(a)]	Result	Qualifier	Monitored Cmpds.[40 CFR 141.40(j)]	Result	Qualifier
Benzene <sup>1</sup>	<0.5		1,2,4-Trimethylbenzene	<1.0	
Carbon tetrachloride <sup>1</sup>	<0.5		1,2,3-Trichlorobenzene	<1.0	
Monochlorobenzene <sup>1</sup>	<0.5		n-Propylbenzene	<1.0	
o-Dichlorobenzene <sup>1</sup>	<0.5		n-Butylbenzene	<1.0	
para-Dichlorobenzene <sup>1</sup>	<0.5		Naphthalene	<1.0	
1,2-Dichloroethane <sup>1</sup>	<0.5		Hexachlorobutadiene	<1.0	
1,1-Dichloroethylene <sup>1</sup>	<0.5		1,3,5-Trimethylbenzene	<1.0	
cis-1,2-Dichloroethylene <sup>1</sup>	<0.5		4-Isopropyltoluene	<1.0	
trans-1,2-Dichloroethylene <sup>1</sup>	<0.5		Isopropylbenzene	<1.0	
1,2-Dichloropropane <sup>1</sup>	<0.5		t-Butylbenzene	<1.0	
Dichloromethane <sup>1</sup>	<0.5		s-Butylbenzene	<1.0	
Ethylbenzene <sup>1</sup>	<0.5		Trichlorofluoromethane	<2.0	
Styrene <sup>1</sup>	<0.5		Dichlorodifluoromethane	<2.0	
Tetrachloroethylene <sup>1</sup>	<0.5		Bromochloromethane	<1.0	
Toluene <sup>1</sup>	<0.5		<b>Other Compounds</b>		<b>Result Qualifier</b>
1,2,4-Trichlorobenzene <sup>1</sup>	<0.5		Acetone	<10	
1,1,1-Trichloroethane <sup>1</sup>	<0.5		Acrylonitrile	<10	
1,1,2-Trichloroethane <sup>1</sup>	<0.5		2-Butanone (MEK)	<10	
Trichloroethylene <sup>1</sup>	<0.5		Carbon disulfide	<1.0	
Vinyl chloride <sup>1</sup>	<0.5		Ethyl methacrylate	<1.0	
Xylenes (total) <sup>1</sup>	<0.5		2-Hexanone	<1.0	
<b>Monitored Cmpds.[40 CFR 141.40(e)]</b>			Iodomethane	<5.0	
Chloroform	3.6		Methyl methacrylate	<1.0	
Bromodichloromethane	9.6		4-Methyl-2-pentanone (MIBK)	<2.0	
Dibromochloromethane	13		Methyl-t-butyl ether (MTBE)	<0.5	
Bromoform	4.9		Tetrahydrofuran	<5.0	
Dibromomethane	<1.0		<b>Comments:</b>		
1,3-Dichlorobenzene	<1.0		The test results on this report relate only to the sample identified on this report. The test results for analytes noted(') meet all TNI (2009 Standard) requirements.  Authorized by Team Lead CJONES on 08/11/2020		
1,1-Dichloropropene	<1.0				
1,1-Dichloroethane	<1.0				
1,1,2,2-Tetrachloroethane	<1.0				
1,3-Dichloropropane	<1.0				
Chloromethane	<2.0				
Bromomethane	<2.0				
1,2,3-Trichloropropane	<1.0				
1,1,1,2-Tetrachloroethane	<1.0				
Chloroethane	<2.0				
2,2-Dichloropropane	<1.0				
2-Chlorotoluene	<1.0				
4-Chlorotoluene	<1.0				
Bromobenzene	<1.0				
cis-1,3-Dichloropropene	<1.0				
trans-1,3-Dichloropropene	<1.0				